DETAILED ACTION

1. Claims 18 and 28 are pending in this application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 18 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2000099970 A1 to Zhao et al.

3. As to claim 18, Zhao teaches an intermediate registry server (VisiBroker Naming Service/cluster) comprising means to receive a request from a client computer for access data associated with an object accessible via an object server ("…invoke a cluster…" page 1 paragraph 0012, "…binding…binding interceptor…bind method…" page 3 paragraphs 0034-0036); means to receive the access data from object server ("…previously bound…" page 1 paragraph 0012) , and, in response to the request, means to request the access data from first and second object registries storing the access data ("…failover…" page 2 paragraph 0033, "…provide failover…" page 1

paragraph 0013, "…alternative server…" page 3 paragraphs 0035/0036); and means to respond to the request by forwarding the access data returned from at least one of the first and second object registries to said client computer ("...forwarding a selected object reference to a client..." page 1 paragraph 0013, "…return…" page 3 paragraph 0035/0036, figures 5/6 page 3 paragraphs 0040/0041).

4. As to claim 28, Zhao teaches a method for remote object invocation from a first environment of a remote object hosted by or accessible by a second environment comprising the steps of: receiving at least a first request for access data from a client computer ("…client machine invokes…" page 1 paragraph 0012, page 3 paragraph 0034); mapping the first request for access data for a remote object to a first remote object registry hosted by first server operating in active mode (figure 5 page 3 paragraph 0040); supplying, from the an object server, the access data to the first object registry (figure 5); reflecting data associated with the first remote object server to the second remote object server/migrating address data associated with the first remote object server to the second remote object server ("…stale object reference…", "…failover…" page 3 paragraphs 0036/0040); directing the access request, from the first remote object server to the second remote object server in event of a fault associated with the first server ("…failover…" page 3 paragraphs 0036/0040); receiving the access data from at least one of the first and second remote object registries ("…return…" page 3 paragraph 0035/0036, figures 5/6 page 3 paragraphs 0040/0041,

page 1 paragraphs 0012/0013) and invoking the method of the remote object via the environment ("…communicate…" page 1 paragraphs 0012/0013).

Response to Arguments

Applicant's arguments filed 3/18/08 have been fully considered but they are not persuasive.

Applicant argues in substance that (1) the "bind interceptor" disclosed in the Zhao prior art is not similar or equivalent to the intermediate registry server of the claimed invention as such does teach or disclose an intermediate register server, and (2) the Zhao prior art does not map any request as claimed since each request is sent directly to each object server.

The Examiner respectfully traverses Applicant's arguments:

As to point (1), the Zhao prior art describes a fault tolerance, load balance and "failover" of CORBA object servers via name service clustering (VisiBroker Naming Service). Name service clustering permits naming service load balancing over a set of object references (access data) contained within the same cluster such that loads are equitably distributed among servers. **Each cluster** (more than one cluster) contains its own unique object binding table which contains object references (access data) that each typically represents a single server. The VisiBroker Naming Service allows you to associate one or more logical names with an object implementation and store those names in a namespace (cluster). It also lets client applications use this service of the cluster to obtain an object reference using the logical name assigned to that object.

When a client invokes a cluster, the VisiBroker Naming Service's load balancing is performed to return an object reference which is bound to the cluster. Load balancing is performed using a load balance algorithm (e.g., Round Robin). The specific algorithm which is used to perform load balancing is specified upon creation of **each naming service cluster**. An object reference is forwarded to the cluster. Next, cluster components are dynamically added to resolve object references subsequent to load balancing each cluster to provide failover. Next, the client communicates with the server associated with the object reference which was selected and forwarded to the client. The VisiBroker Naming Service functioning as an intermediate server between the client and server is called when invoking a cluster to obtain the object reference required for communicating with the server associated with the object reference and as such the Zhao prior art does teach an intermediate registry server as claimed.

As to point (2), contrary to Applicant's assertion the Zhao prior art does teach the step of mapping a request as claimed. Firstly, in the Zhao prior art a request/invocation is only sent the server after the object's reference is resolved and the object reference is resolved when an object reference is returned to the client. When a client invokes a cluster located under a particular context or specific directory, i.e., "resolves," a load balance is performed to **return an object reference** (access data) which was previously bound to the cluster. The client machine **may then** communicate with the server associated with the object reference which was selected. The cluster/VisiBroker Naming Service **looks up/obtains** the object reference (access data) and then

returns/forwards it to the client after the invocation then the client can communicate with the server and thus provides the mapping functionality.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 5,745,683 to Lee et al.: directed to system and method for allowing disparate naming service providers to dynamically join a naming federation.

U.S. Pat. No. 6,236,999 B1 to Jacobs et al.: directed to duplicated naming service in a distributed system.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is 571-272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

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